Figure 5-18 Encouraging the use of open space design principles to guide small scale subdivisions in rural areas is needed to preserve the rural qualities of the Byway. The top photo is an existing rural hillside; the top plan and 2nd photograph (simulated view) show typical practices for small scale subdivisions. The bottom plan shows how homes can be grouped together on less visible lands to preserve the open views shown in the top photograph.

constructed on individual lots or small subdivisions rather than on large multiple-unit subdivisions or planned developments. The current trend is that larger homes are being constructed on prime view lots. Families are increasingly seeking out rural homesites with an attractive view. They may soon be disappointed, however, when other like-minded families move out with the same goal in mind.

There are two clear choices for future development patterns near the Byway. The first choice is to continue with standard development practices. This implies that all available and legally buildable lots will be constructed at the density allowed by present zoning laws. The second choice is to gently guide development to those locations that are most suitable and desirable for residential construction. This approach requires incentives to encourage development on the most suitable lots and to discourage development on those that are unsuitable. This does not necessarily mean a change in density, and by extension, development value. Rather, this idea calls for rearrangement of the pattern of development.

The rural character of the land can carefully be preserved using a pre-planning strategy to identify sensitive lands. In what is now a fairly standard practice, areas constrained by soil, slope, or other restrictions are identified and mapped (see hatched areas, Figure 5-18). For the National Road corridor, the scenic qualities of the landscape are also considered by identifying visually prominent areas that should be avoided (Figures 4-1 and 4-2 for corridor definition maps, which identify the Byway viewshed).

Buildings should be placed away from the tops of ridges and other prominent areas with selective tree cutting instead of clear-cutting vegetation, or the rural view will change. These homes can still achieve a desirable view, without spoiling the view for others. Buildings should also be placed to follow the contours of the site in order to reduce the impact of cut and fill areas.

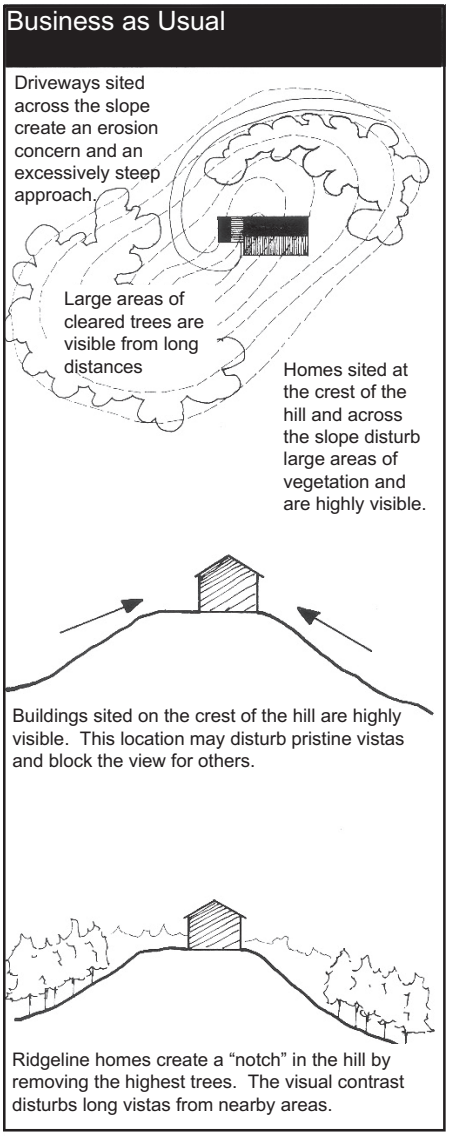
An open space development approach does require some creative thinking about how the new neighborhood functions. Environmental impacts from housing development on the site can be reduced by the use of shared driveways and narrower roads to reduce the amount of vegetation removed. With smaller lot sizes, drain fields would need to be shared. This requires less investment to support infrastructure for the development – but does require some form of legally-binding agreement to ensure future maintenance. The cost of utilities and road construction is reduced with a more tightly knit site arrangement, which means a lower cost for lots. A homeowners association can be created in the community to take responsibility for the narrower private roads and shared drain fields.

The open space development approach would provide potential for bonus lots to serve as an incentive to utilizing good design, depending

upon how the waste treatment would be handled, while still providing areas of common open space, and the least impact on views. An open space design development leaves more open space allowing storm water runoff to occur more naturally with the surrounding preserved woodlands and grasses. The preservation of surrounding agricultural land supports the continued rural character of the area, and allows agricultural practices to continue to benefit the community. More forested areas are preserved, protecting existing wildlife habitat. Floodprone land areas can be preserved.

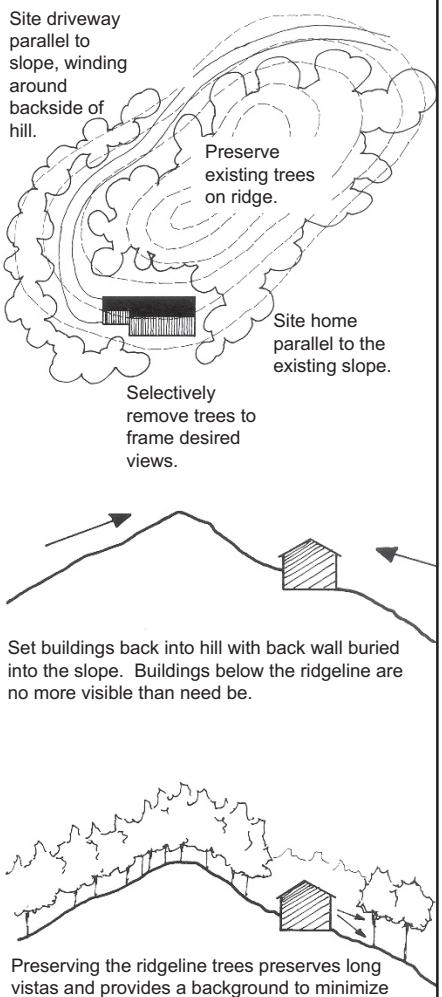
In addition to the strategies suggested for "open space development" there are a few simple design guidelines that can be followed to preserve rural character when building a single house lot not associated with a subdivision. Homes constructed in rural areas are primarily situated on the more gently sloping lands with soils nearby that are suitable for septic tank drainfields. Within these constraints, individual homes can be sited according to the following simple guidelines to reduce visual impact:

- Site homes away from the top of a steep hill (often called the "military crest" of the hill). By setting the home back away from the crest, a homeowner can reduce the amount of area that can be seen from the Byway, while at the same time retaining the panoramic view – being able to see out without being seen;
- For ridgeline sites, locate the home slightly below the top of the hill so that the roofline does not stand out above the trees. Clearing trees for a ridgeline home will create a "notch" in the hill when seen from a distance. Care should be taken to preserve trees close to the home to reduce the visual contrast between the homesite and the surrounding landscape;
- Selectively remove vegetation, rather than clear-cut vegetation to improve the view. The picturesque qualities of a view can actually be improved by framing the view with nearby trees. Such foreground elements (leaves and branches) provide a scale reference, increasing the depth of the view;
- Site driveways so they are parallel to the slope, winding up a hill rather than perpendicular to the hill. This reduces the cost of grading the road, makes it easier to traverse in winter, and is likely to reduce visual impact from the Byway;
- Site homes so the long dimension of the house is parallel to the slope. When building on slopes, houses should be designed with multiple levels with one wall buried into the slope, thus reducing the amount of grading required to accommodate the house. Houses designed to be on more gentle slopes (such as a Colonial-style home) should be built on flat sites, not remote hillsides; and
- Use materials and colors that minimize contrast with the surrounding landscape. A home with a dark roof and siding left to weather normally (protected by transparent stains) will have much less contrast in a woodland setting than a house painted white and roofed with light asphalt shingles.



Simple guidelines for individual homes ensure that new homes blend in with the landscape rather than stand out (also facing page)

Simple Guidelines to Preserve Scenic Quality



Monitor the Siting of New Communication Towers

Another scenic conservation issue facing communities along the Byway is the construction of cellular communication towers. Unfortunately, telecommunication towers require an ability to send signals in an unobstructed straight line. The result is that the preferred sites are usually located on ridgelines. The companies desiring to construct these towers wish to do so at the lowest economic cost, resulting in the construction of a few taller towers, rather than more frequently spaced shorter towers located at tree line, for example.

For future utility siting issues, whether it is a communication tower, or for a high-voltage or gas transmission line, a simple process can be used to ensure that visual impacts are minimized:

- Identify alternative locations, alternative heights, and/or alternative transmission routes. Encourage the sharing of facilities by service providers (saving installation costs, time, and potential legal fees);
- Describe the visual characteristics of the project for each alternative (e.g. the height of the tower and clearance required for vegetation);
- Determine, for each alternative, the extent of the geographic area from which the proposed facility can be seen (using digital elevation models from the US Geological Survey and viewshed analysis software);
- Use balloon tests to demonstrate the location of towers. Balloons should be flown at the height of the proposed tower and photographs taken from the most visually sensitive locations (as demonstrated in step 3); and
- For areas where there is a high degree of concern for the potential visual impacts, such as a panoramic view, use digital editing to superimpose a photograph of a similar type of tower onto the photograph of the balloon taken from the scenic viewpoint (using the balloon for a scale reference).

This approach will provide clear and factual information about both the geographic extent and significance of the visual impacts. By comparing viewshed maps and simulations, the site with the least visual impact can be recommended. If the location or height of the structure cannot be mitigated, a request should be made to camouflage the tower using paint color and/or disguising the tower as a pine tree (an available design). The problem with the pine tree camouflage approach is that the silhouette of the “tree” is often out of scale with the surrounding vegetation. This approach can work if the height of the tower can be lowered to the point where the tower is in scale with its surrounding tree line.

Community and Byway Appearance Strategies

Improving community appearance was frequently mentioned by participants at public workshops. Community appearance issues identified include:

- The appearance and upkeep of homes and yards;
- The need to eliminate redundant utility poles and wires;

- The need for additional litter pickup; and
- The need to reduce or eliminate existing billboards.

The following sections outline steps for improving community appearance (Figure 5-19).

Figure 5-19 The City of Baltimore and its partner organizations are working hard to beautify city and neighborhood entrances. In addition to the new mural at the junction of Frederick Ave. and Pratt St., this lot adjacent to the Byway is scheduled for landscaping in the spring of 2001. Collectively, a large number of small scale individual efforts can often achieve as good or better result than a one-size-fits-all, large-scale effort.

Develop a Resource Guide for Homeowners

One approach to helping improve community appearance is to produce a "Resource Guide" that offers a variety of practical information designed to aid homeowners in the economical care and maintenance of their property. As with many similar rural areas, there is often a lack of coordinated, easy-to-find information about the everyday aspects of rural residential life, including topics such as:

- How to dispose of unwanted vehicles and appliances;
- How to carefully prune trees and shrubs or care for a garden;
- How to keep invasive plant species from taking over your yard;
- How to manage small pastures, tree crops, or ponds;
- How to maintain your home;
- How to add on to your house in a manner that is sympathetic to its character and architectural style; or,
- How to find qualified people to help accomplish any of these tasks.

The original USDA Soil Conservation Service (now called the Natural Resource Conservation Service) once provided advice on many of these topics, and in some cases the information is still available, but it is difficult to find in one location (such as a town library). This plan recommends that a compendium of resource information be gathered together in one location for easier access to all residents along the Byway. Posting information on an Internet web site might be one option, along with creating an actual document that could be made available to homeowners and businesses along the corridor.

Reduce the Visual Impact of Overhead Utility Wires

In some cases, it may be desirable to improve roadside character by placing utility lines underground or otherwise relocating them to improve the view. The cost associated with placing utilities underground varies with the complexity of the systems involved – generally higher in more densely developed areas. In some cases, utility lines can be slightly relocated to improve the view – for example, relocating utility poles to the opposite side of the road, away from a panoramic view. There are several locations where underground utilities may be desirable:

- Historic sites and other byway features attractive to visitors;
- Historic districts, hamlets and neighborhoods; and
- Particularly scenic views and overlooks.

Routine maintenance such as pruning and control of plant material within utility easement areas dramatically affects both the aesthetic and habitat value of roadside vegetation. Careful pruning and management of utility rights-of-way along the Byway can help to mitigate some of the aesthetic and habitat impacts. Planting small

MSHA's ADOPT-A-HIGHWAY PROGRAM

What Is Adopt-A-Highway ?
Adopt-A-Highway program allows volunteer groups to pick up litter along non-interstate roadways as a community service.

Who Can Adopt-A-Highway?
Any family, business, school or civic organization can adopt a state maintained highway.

How to Adopt-A-Highway?
Call your local State Highway office for a list of adoptable roads, complete an agreement, safety training. Pick up your supplies and you are ready to go!

What is the Responsibility of the Adopting Group?
As the adopting group, you agree to pick up litter from your section of roadway (1-3 miles) four times a year for a two-year period.

What is the Responsibility of MSHA?
MSHA will supply the group with:
- *Orange safety vests*
- *Hats*
- *Trash bags*
- *Two adopt-a-highway metal signs with group name*
- *Two SWAT (Stop Waste and Trash) roll-up caution signs*
- *Safety literature and video*

– from Maryland State Highway Administration

flowering trees and shrubs along the edge of the right-of-way adds color and variety and softens the harsh straight-line edge. Many flowering trees are smaller growing and can be safely planted near utility lines. New shrub layer plantings help to mimic the natural occurring woodland edge while enhancing wildlife values. Shrubs can be planted in masses for greatest effect. In the long-term, this will also help to eliminate otherwise invasive plant species that must be continuously pruned by encouraging vegetation able to compete with the invader(s).

In many cases, a simple maintenance agreement can be developed with the utility company to ensure that trees planted are appropriate for use in and around power and other utility lines, and that underground utility lines will not be disturbed. The agreement should also make it clear to the maintenance crews that they do not need to maintain this particular section. Property owners can then undertake planting projects on their properties. Property owners must be aware that in addition to not creating interference with utility lines, new plantings along the Byway should be far enough away from intersections so as not to block sight lines or create a traffic hazard.

Seek 100% Adoption of the Byway for Litter Pickup as Part of the Adopt-a-Highway Program

The Adopt-a-Highway Program is an excellent way to gain better participation in improving the roadside appearance of the Byway. In addition to litter pickup, it may be possible to enlist groups to plant roadside trees and perform other beautification efforts in cooperation with MSHA maintenance personnel (Sidebar, page 5-25).

Reopen Vistas

There are certain areas where open views of farmland and the surrounding hills have been obscured by successional growth of shrubs and trees that extend beyond the reach of the MSHA mowers and before the farm field begins. These narrow strips of vegetation have obscured many fine views.

Selective opening of these vistas can be accomplished through cooperative efforts between the landowner and MSHA. However, maintenance of these areas to retain open vistas is a very labor-intensive operation. Typically woody materials that can no longer be mechanically removed start to form after one year, and spraying herbicides (particularly near a river) is not recommended. Instead, selective openings should be maintained according to the following guidelines:

- Vistas should be opened at a shallow angle to the highway (30-45 degrees is preferred);
- Vistas should be located away from warning signs for approaching curves or other hazards;
- Vistas should not be located on a curve or leading into a curve (due to sight lines and potential distractions to the driver);

- Clearing need not be extensive – if the view is worthy of several hundred feet of clearing, then a pull-off should be constructed; and
- Mature trees can be pruned to frame a view (allowing observers to look past the lower branching habit of the tree to see the view).

As an example, the Kent Land Trust in Connecticut started an adopt-a-view program to find volunteers to help clear and maintain some of the most desirable vistas. This is an innovative approach that should be considered for the Maryland Historic National Road Scenic Byway.

Choose Scenery over Billboards along the Byway

With scenic byway designation, the traveler's expectation is of a seamless travel experience immersed in the characteristics of the region that they are exploring. If it is the goal of a community to preserve and enhance a scenic area for tourism and economic development, then they must make a choice between billboards and scenery. The Maryland Historic National Road Scenic Byway includes both National Highway System and non-NHS designated byway segments.

For segments of the Byway within the National Highway System (NHS), no new billboards can be constructed (Sidebar, page 5-26). Cash compensation has to be paid to billboard companies to remove existing billboards. For non-NHS segments of the Byway, jurisdictions should adopt ordinances not allowing construction of new billboards. The removal of existing billboards in the **non**-NHS segments can be accomplished through a process known as amortization (see definition below). Amortization cannot be used to remove billboards on NHS segments.

An amortization process allows for nonconforming signs to remain in place for a sufficient period of time so as to amortize its cost before requiring their removal. In a May 1991 letter addressed to the late Senator John Chaffee of Rhode Island, the Office of the Comptroller General of the United States advised that it had reviewed the constitutionality of the use of amortization in the removal of billboards and concluded that the majority of cases hold that billboard amortization is not violative of the US Constitution. According to the publication *Street Graphics and the Law*, the overwhelming majority of courts hold that amortization is a constitutional technique that does not violate the taking-of-property clause in the US Constitution.

The most critical element in implementing an amortization process is the time frame under which the billboard should be amortized. Local officials should pay close attention to the valuation of billboards. Billboards are considered to be tangible personal property and are taxed each year according to their value. If local officials check the number of permitted locations for a particular company against the tangible personal property tax rolls, they should easily be able to

MARYLAND HISTORIC NATIONAL ROAD SCENIC BYWAY SEGMENTS ON THE NATIONAL HIGHWAY SYSTEM (NHS):

- *US 40 Alternate from downtown Frederick to the town limits of Hagerstown;*
- *US 40 from downtown Hagerstown to downtown Clear Spring;*
- *I-68 sections; and*
- *US 40 from Keysers Ridge to Pennsylvania-Maryland line.*

These are the sections of the Byway where no new billboards can be constructed due to Federal law.

MAYOR O'MALLEY'S GATEWAY IMPROVEMENT PROGRAM

The City of Baltimore's "Great Gateways Initiative" is designed to spruce up some of its main commercial corridors – the routes people take in and out of the city. Too often, City residents have to give elaborate, winding directions to keep visitors from being subjected to Baltimore's blight.

Starting immediately, the City is making rapid visual improvements to its gateways – including cleanup, road repair and line painting, tree and flower planting, boarding up vacant homes, sanitation and code enforcement, graffiti removal, cutting back overgrowth, replacing faded signs, and cleaning and repainting all City equipment (guiderails, meter posts, signal control boxes, etc.). The City is also going to install new benches and hang new banners from lightposts – inscribed with the neighborhood's name, to help instill a sense of community pride. Welcome signs will be installed at entrances to the City, and the City will resume painting bridges.

*One of the gateways that will be targeted is **Frederick Avenue**, which brings travelers on the Byway from Baltimore County into the city.*

OPERATIONAL GOALS

- *Rapid visual improvements to gateway arteries*
- *Cooperative interagency coordination*
- *Development of a plan to sustain efforts*

determine: whether billboard companies are filing returns; and the approximate value per structure (this is the value that is offered).

Local officials should then determine the commercial rates for local billboards. If the commercial rates average $1,000 per month per sign face then the gross annual revenue can be expected to run in the area of $24,000 (for a double-sided billboard). Over a five-year period, the gross revenue may yield $120,000. If billboard structures have an average value of $10,000 (or whatever is claimed on the tax return), and given a choice between the alternatives of "cash compensation" or a "five-year amortization," (and then removing the billboard), the billboard industry would choose the amortization alternative every time. However, local governments are usually unable to come up with the funds to immediately purchase a billboard structure. Billboard companies typically fight the amortization method because they know it is unlikely that the local government will agree to "buy them out" up front.

Some key points to remember:

- That billboards are tangible personal property (not real property);
- That a structure is not actually seized or confiscated, but is simply required to be removed;
- That most billboard structures, or portions of the structures, are movable and reusable;
- That amortization represents a "middle ground" between immediate termination and the indefinite continuance of a nonconforming use; and
- That billboard companies will come out better with a reasonable amortization schedule than they ever would by up-front cash compensation for a sign's value.

In summary, a two-pronged approach is recommended. Prohibit future construction of billboards along the entire route, through the adoption of local ordinances along portions of the route not on the National Highway System (NHS). Then seek removal of existing billboards through cash compensation for NHS routes and through the use of the amortization method with a reasonable time frame to amortize the cost of a billboard on non-NHS sections of the route. National Scenic Byways grant funds are one source of funds for cash compensation to remove existing billboards along NHS routes.

Physical Enhancements

There are a number of direct physical enhancements that are needed along the Maryland Historic National Road Scenic Byway (Figures 5-20 through 5-22 for examples of case studies). Needed enhancements include:

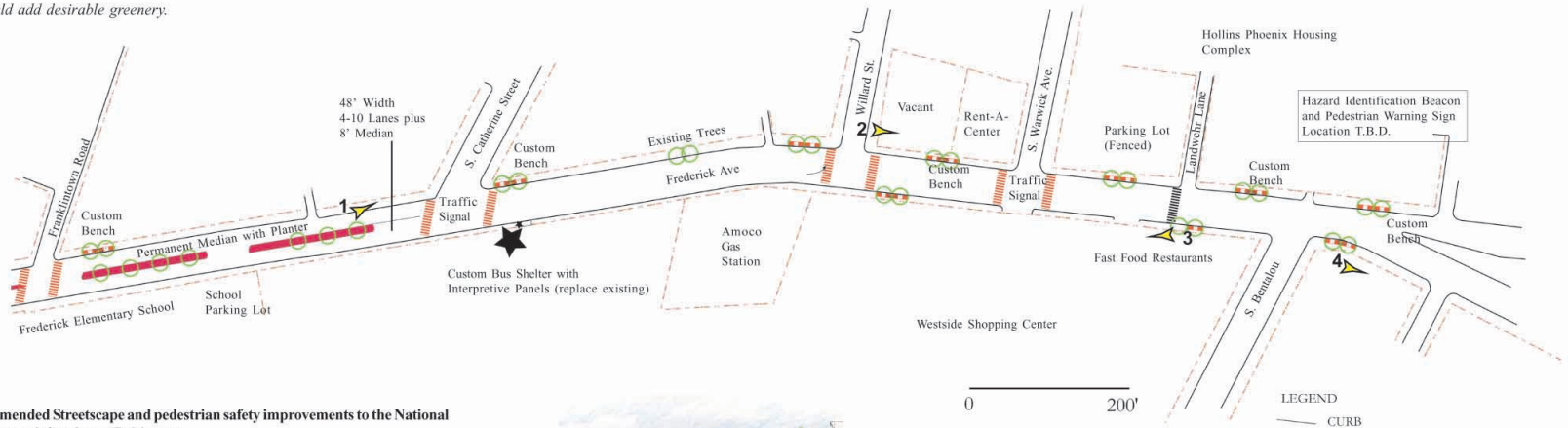
- Wayfinding (directional and visitor information);
- Waysides and pull-offs;
- Streetscape improvements (including gateways, traffic calming, pedestrian safety measures, landscape, lighting, and signs);

1 *"Tire plantings" near S. Catherine Street intersection. Street trees cannot be planted due to lack of space. A median to replace the center turn lane between S. Catherine and Franklintown Road could add desirable greenery.*

2 *Vacant lot on the corner of Willard Street and Frederick Ave.*

3 *Remnant brick alley driveway near entrance to Kentucky Fried Chicken at shopping center. Brick pavers have been recommended for tree pits and cross walks.*

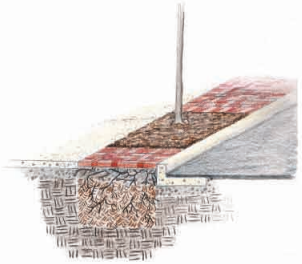
4 *Carrollton Ridge Mural welcomes visitors to Crab Alley located a few blocks away.*



Recommended Streetscape and pedestrian safety improvements to the National Road through Southwest Baltimore:

Tree plantings - 21 new street trees in continuous planting beds to insure street tree survival. Soil amendments are recommended. Brick pavers could partially cover the beds to allow for pedestrian traffic as well as water and air flow to tree roots.
Custom Bus Shelter - Replace existing shelter at main entrance to Westside Shopping Center with custom bus shelter. More shelters could be installed in the shopping center vicinity as determined by ridership and additional planning.
Interpretive Panels - To be embedded in the custom bus shelter(s). Panels guaranteed to be graffiti and vandalism-proof are available at relatively low cost. The panels can be installed directly into the custom bus shelters during construction.
Custom Benches - For bus stops unable to be served with shelters, custom benches with arm rests (to prevent sleeping) are recommended. Interpretative panels may also be installed into the backs or even seats of the benches if desired.
Permanent 8' Median with Planter - Recommended to replace left turn lane from Franklintown Road to S. Catherine Street in order to narrow the look and feel of the road. The right-of-way along the sidewalks in this vicinity is too narrow to plant street trees next to the row-houses.
Hazard Identification Beacon and Pedestrian Warning Sign - Recommended to warn motorists of heavy pedestrian traffic at Landwehr Lane, which is used by residents of the new Hollins Phoenix complex.
Brick Paver Crosswalks - Recommended to replace painted crosswalks to add color to streetscape.

Example bus shelter detail. Custom bus shelters available from the Mass Transit Authority lend an historical flavor to the streetscape. Interpretative panels about the National Road can be embedded directly into the shelter. Custom benches can be installed in areas where a shelter is unwarranted.



Tree planting pit detail. To facilitate street tree survival, a continuous planting bed with amended soil is recommended. Brick pavers on gravel base allow for pedestrian traffic and add color

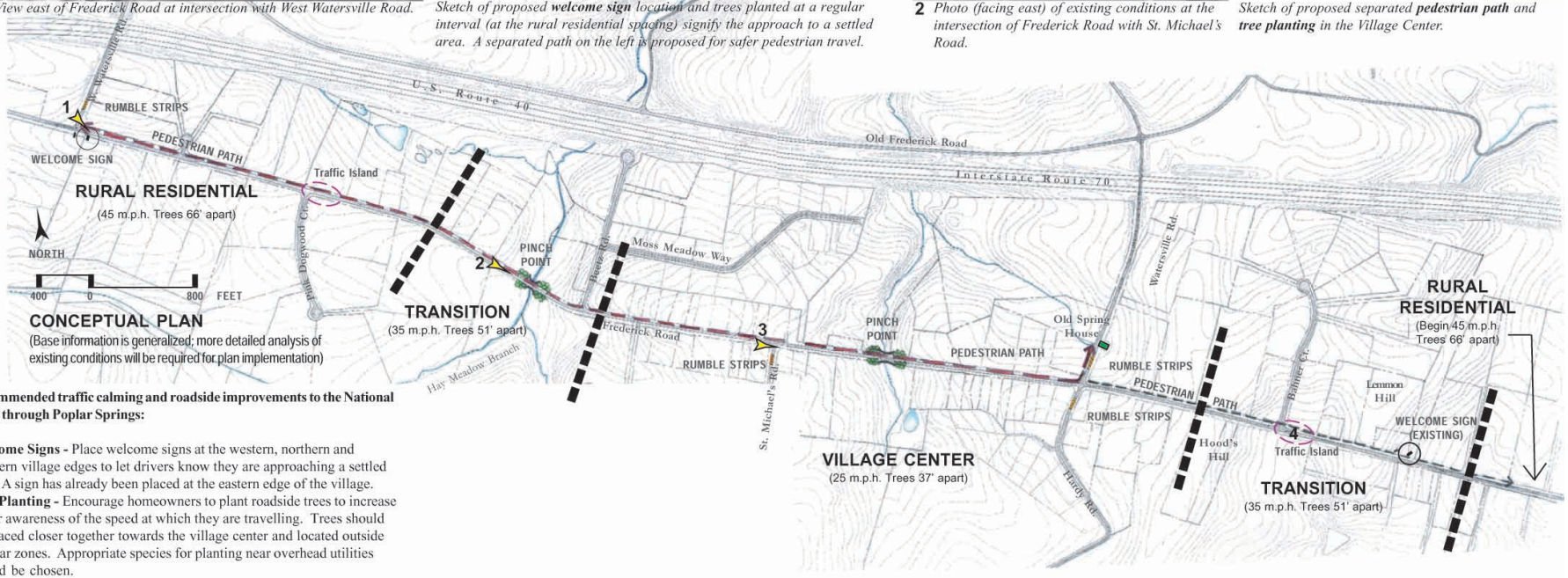
Figure 5-20
Shipley Hill/Westside Shopping Center - example of enhancement for an urban neighborhood along the Byway

1 *View east of Frederick Road at intersection with West Watersville Road.*

*Sketch of proposed **welcome sign** location and trees planted at a regular interval (at the rural residential spacing) signify the approach to a settled area. A separated path on the left is proposed for safer pedestrian travel.*

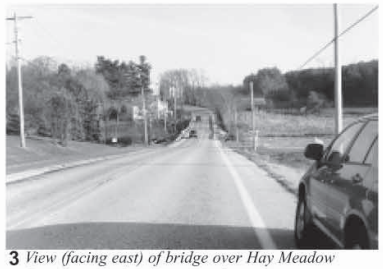
2 *Photo (facing east) of existing conditions at the intersection of Frederick Road with St. Michael's Road.*

*Sketch of proposed separated **pedestrian path** and **tree planting** in the Village Center.*



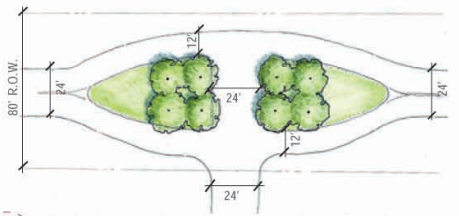
Recommended traffic calming and roadside improvements to the National Road through Poplar Springs:

Welcome Signs - Place welcome signs at the western, northern and southern village edges to let drivers know they are approaching a settled area. A sign has already been placed at the eastern edge of the village.
Tree Planting - Encourage homeowners to plant roadside trees to increase driver awareness of the speed at which they are travelling. Trees should be spaced closer together towards the village center and located outside of clear zones. Appropriate species for planting near overhead utilities should be chosen.
Pinch Points - Create areas where the road appears more narrow by reducing shoulder width and planting trees closer to the road while still staying out of the clear zone.
Rumble Strips - Use rumble strips to give drivers an audible warning to slow down.
Separated Pedestrian Path - Locate on the north side of the road. A separated path would provide a safer way for people to walk and jog along the road.
Traffic Islands - Install traffic islands at both ends of the village to calm traffic and provide a safer way to turn onto the road.
Darkened Shoulders - Darken the shoulders of the road to narrow its look and feel. Can be accomplished with asphalt that has a darker aggregate in the mix than the travel lanes.
Infill Development - Build on vacant parcels in the village center to enhance the settled feeling of the place.
Utilities - Move utility lines to the north side of the road to reduce competing visual elements.



3 *View (facing east) of bridge over Hay Meadow Branch just before Beetz Road.*

*Sketch of proposed **"pinch point."** Road narrows and trees are grouped at the bridge to reduce the apparent width of the road. The street trees are paired for greater impact. Utilities lines have been moved to the north (left) side of the road.*



4 *Sketch of proposed **traffic islands** to calm traffic and provide a safer method of turning on the National Road.*

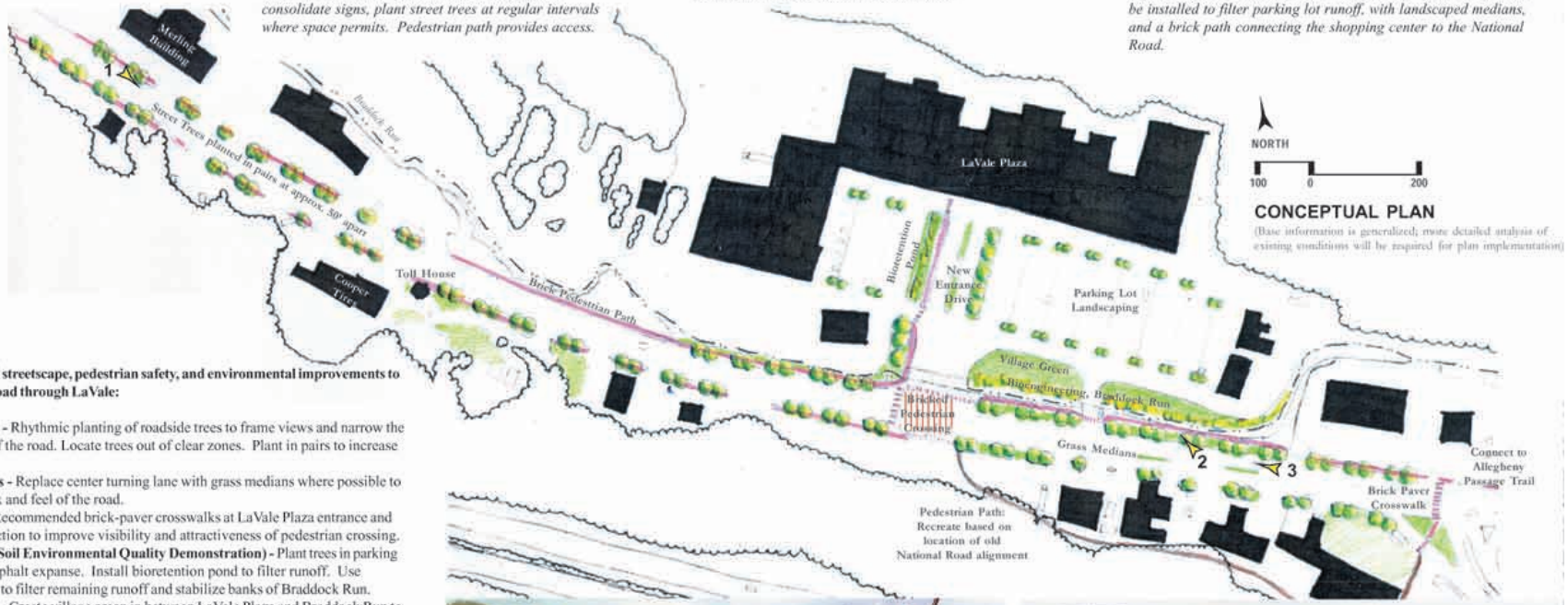
Figure 5-21
Poplar Springs - illustrative example of traffic calming techniques applied to an urbanizing section of the Byway

1 *View east at Merling Building.*

Sketch of proposed streetscape improvements to open up views to Toll House: place utilities underground, consolidate signs, plant street trees at regular intervals where space permits. Pedestrian path provides access.

2 *View of Braddock Run in foreground and LaVale Plaza in back, looking northwest from the National Road*

Diagram of LaVale Plaza entrance illustrating proposed improvements: a demonstration "bioretention" pond on left could be installed to filter parking lot runoff, with landscaped medians, and a brick path connecting the shopping center to the National Road.



Recommended streetscape, pedestrian safety, and environmental improvements to the National Road through LaVale:

Tree plantings - Rhythmic planting of roadside trees to frame views and narrow the look and feel of the road. Locate trees out of clear zones. Plant in pairs to increase visual impact.
Grass Medians - Replace center turning lane with grass medians where possible to narrow the look and feel of the road.
Crosswalks - Recommended brick-paver crosswalks at LaVale Plaza entrance and MD 53 Intersection to improve visibility and attractiveness of pedestrian crossing.
LaVale Plaza (Soil Environmental Quality Demonstration) - Plant trees in parking lot to reduce asphalt expanse. Install bioretention pond to filter runoff. Use bioengineering to filter remaining runoff and stabilize banks of Braddock Run.
Village Green - Create village green in between LaVale Plaza and Braddock Run to increase green space.
Underground Utility Wires - Place utility wires underground to open up views to the toll house and to lessen competing visual elements.
Separated Pedestrian Path - Install path to provide a safe pedestrian loop. The path follows Braddock Run on the north side and the old National Road alignment on the south side where possible. Path could resemble look and feel of old National Road, or use brick pavers for color. Include connecting path or sidewalk from National Road to LaVale Plaza entrance.
Signs - Consolidate signs and place on lower stone, brick, or wood bases. Text on signs should be 4"-5" high for legibility.
Interpretative Center - An exterior interpretive display at the Toll House would be used to teach visitors about life along the National Road since the early 1800's. Information about other toll houses, the mile markers, inns, bridges, and more could be incorporated into the existing embankment and landscaped park.

3 *View west from Super 8 Motel entry drive toward gas stations and Maryland Discount Beverage Center. Toll House is up ahead on the left.*

Sketch of proposed streetscape improvements: grass medians to narrow the look and feel of the road, street trees planted at regular intervals, signs lowered and placed on stone, wood, or brick bases, pedestrian path. Utilities have been placed underground.

Figure 5-22
LaVale Enhancement Proposals